

What is claimed is:

1. A visual display unit having an image that is to be viewed by a user, said visual display unit comprising:

a central processing unit connected to said visual display unit; and

5 sensor means of measuring the distance between the user and said visual display unit; and

dynamically sizing means, controlled by said central processing unit, for changing the size of the image so that the image appears to the user as being of constant size when the user moves closer or further from said visual display unit

10 as provided by said sensor means; and

memory storage means for storing the information about the user's eyesight and corresponding magnification of the image previously used.

2. The visual display unit of claim 1 wherein said sensor is an ultrasonic tape measure.

15 3. The visual display unit of claim 1 wherein said central processing unit has a refresh rate of less than or equal to 25 times per second to provide smoother transition in the size of the image as said sizing means alters the magnification of the image.

4. The visual display unit of claim 1 further comprising user activation means for  
20 responding to sudden changes in distance of the user from said visual display unit as measured by said sensor means.

5. The visual display unit of claim 4 wherein said user activation means when activated causes the image to scroll.

6. The visual display unit of claim 4 wherein said user activation means when activated causes the image to change in magnification.

7. A visual display unit having an image that is to be viewed by a user, said visual display unit comprising:

- 5 a central processing unit connected to visual display unit; and  
a web camera; and

still image capture means to capture a scene provided by said web camera, wherein the scene includes the user have at least identifiable points on the user such that said central processing unit calculates the distance between said visual  
10 display unit and the user; and

dynamically sizing means, controlled by said central processing unit, for changing the size of the image so that the image appears to the user as being of constant size when the user moves closer or further away from said visual display unit.

- 15 8. The visual display unit of claim 7 further comprising memory storage means for storing the information about the user's eyesight and corresponding magnification of the image previously used.

9. The visual display unit of claim 7 further comprising at least two colored disks which are associated with the user and which serve as said at least two  
20 identifiable points on the user such that the distance to the user is calculated.

10. The visual display unit of claim 7 wherein said central processing unit has a refresh rate of less than or equal to 25 times per second to provide smoother

transition in the size of the image as said sizing means alters the magnification of the image.

11. The visual display unit of claim 7 further comprising user activation means for responding to sudden changes in the measured distance of the user from said  
5 visual display unit.

12. The visual display unit of claim 11 wherein said user activation means when activated causes the image to scroll.

13. The visual display unit of claim 11 wherein said user activation means when activated causes the image to change in magnification.